

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A method of producing a security document or device comprising a transparent substrate and an optically diffractive device, the method comprising the steps of:

applying a transparent coating to one side of the substrate;

5 placing a single mask in the path of laser radiation to create a patterned laser beam bearing the pattern of the desired diffractive device,

10 irradiating an area of a surface of the transparent coating on one side of the substrate with said a-patterned laser beam bearing the pattern of the desired diffractive device to ablate selected portions of the surface and thereby form a three-dimensional optically diffractive structure in said surface-transparent coating.

Claim 2 (canceled)

Claim 3 (currently amended): A method of producing a security document or device according to claim 1, wherein the substrate ~~includes~~ comprises a transparent plastics film.

Claim 4 (original): A method of producing a security document or device according to claim 3, wherein the transparent plastics film is formed from polymeric material.

Claim 5 (canceled)

Claim 6 (currently amended): A method of producing a security document or device according to claim ~~5~~ 1 wherein the transparent coating is formed from polymeric material.

Claim 7 (currently amended): A method of producing a security document or device according to claim 5-1, wherein ~~the substrate further includes~~ a reflective coating is applied to the transparent coating after the optically diffractive structure is formed in the transparent coating.

Claim 8 (original): A method of producing a security document or device according to claim 7, wherein the reflective coating is formed from polymeric material containing metallic pigment particles.

Claim 9 (currently presented): A method of producing a security document or device according to claim 7, wherein both the reflective coating and the transparent coating ~~may be~~ are formed from material which is similarly resistant to physical degradation.

Claim 10 (currently amended): A method of producing a security document or device according to claim 5 1, wherein the substrate further includes a transparent layer applied to the transparent coating.

Claim 11 (original): A method of producing a security document or device according to claim 10, wherein the transparent layer is formed from polymeric material.

Claim 12 (previously presented): A method of producing a security document or device according to claim 10, wherein both the transparent layer and the transparent coating are formed from material which is similarly resistant to physical degradation.

Claims 13-17 (canceled)

Claim 18 (previously presented): A method of producing a security document or device according to claim 1, the method further comprising the step of:

applying at least one opacifying layer to the substrate, said at least one opacifying layer only partly covering a surface of the substrate to leave at least said optically
5 diffractive device uncovered by said opacifying layer.

Claim 19 (canceled)

Claim 20 (currently amended): A method of producing a security document or device comprising a substrate and a detectable polarisation pattern, the method comprising the steps of:

placing a mask in the path of laser radiation to create a single pattern laser
5 beam bearing the pattern of the desired polarisation pattern; and

exposing an area of a surface on the one side of the substrate to a the patterned laser beam bearing the pattern of the desired polarisation pattern which produces the desired polarisation pattern in said surface.

Claim 21 (canceled)

Claim 22 (previously presented): A method according to claim 20 further defined as exposing an area of the said surface to a photo-exposure process causing photo-polymerisation of said surface to produce the desired polarisation pattern.

Claims 23-24 (canceled)

Claim 25 (currently amended): A method of producing a security document or device according to ~~either one of claims 19 or claim 20~~ wherein the substrate ~~includes~~ comprises a transparent plastics film.

Claim 26 (previously presented): A method of producing a security document or device according to claim 25, wherein the substrate further includes a transparent coating applied to the transparent plastics film.

Claim 27 (previously presented): A method of producing a security document or device according to claim 26, wherein the substrate further includes a reflective coating applied to the transparent coating.

Claim 28 (previously presented): A method of producing a security document or device according to claim 27, wherein both the reflective coating and the transparent coating may be formed from material which is similarly resistant to physical degradation.

Claim 29 (previously presented): A method of producing a security document or device according to claim 26, wherein the substrate further includes a transparent layer applied to the coating.

Claim 30 (previously presented): A method of producing a security document or device according to claim 29, wherein both the transparent layer and the transparent coating are formed from material which is similarly resistant to physical degradation.

Claim 31 (previously presented): A method of producing a security document or device according to claim 25, wherein the substrate further includes a reflective coating applied to the transparent plastics film.

Claim 32 (previously presented): A method of producing a security document or device according to claim 31, wherein the substrate further includes a transparent coating applied to the reflective coating.

Claim 33 (previously presented): A method of producing a security document or device according to claim 32, wherein both the reflective coating and the transparent coating are made of material which is similarly resistant to physical degradation.

Claim 34 (previously presented): A method of producing a security document or device according to claim 25, the method further comprising the step of applying at least one opacifying layer to the substrate, said at least one opacifying layer only partly covering the surface of the substrate.

Claim 35 (currently amended): A method of producing a security document or device comprising a transparent plastics substrate and a transmissive optically diffractive device, the method comprising:

applying a transparent coating to one side of the transparent plastic substrate;

5 irradiating an area of a surface of the transparent coating on one side of the substrate with a patterned laser beam to ablate selected portions of the surface and thereby form a transmissive optically diffractive structure in said ~~surface~~ transparent coating.

Claim 36 (previously presented): A method according to claim 35 wherein a mask is placed in the path of laser radiation to create said patterned laser beam bearing the pattern of the desired optically diffractive structure.

Claim 37 (currently amended): A method according to claim 35 wherein the transparent plastics substrate ~~includes~~ comprises a polymeric film material.

Claims 38-40 (canceled)

Appln. No. 10/019,086
Amdt. dated June 1, 2005
Reply to Office Action of May 20, 2005

Claim 41 42-(currently amended): A method according to claim 40-35 wherein a transparent layer is applied over the ablated surface of the transparent coating forming the optically diffractive structure.

Claim 42 43-(previously presented): A method according to claim 35 wherein at least one opacifying layer is applied to at least one surface of the transparent plastics substrate except in the area of the transmissive optically diffractive structure.

Claims 43-55 (canceled)

Respectfully submitted,

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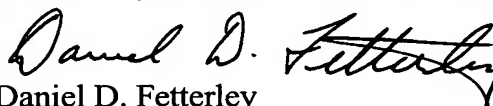
Claim 41 42-(currently amended): A method according to claim 40-35 wherein a transparent layer is applied over the ablated surface of the transparent coating forming the optically diffractive structure.

Claim 42 43-(previously presented): A method according to claim 35 wherein at least one opacifying layer is applied to at least one surface of the transparent plastics substrate except in the area of the transmissive optically diffractive structure.

Claims 43-55 (canceled)

Respectfully submitted,

ANDRUS, SCEALES, STARKE & SAWALL, LLP

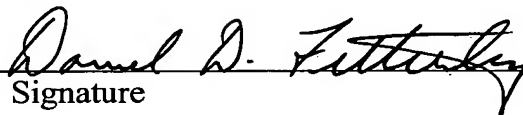


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